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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,362	04/16/2004	Kyung Su Chae	8733.1024.00-US	8091

7590                    07/07/2008  
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EXAMINER
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LIN, JAMES

ART UNIT	PAPER NUMBER
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1792

MAIL DATE	DELIVERY MODE
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07/07/2008            PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/825,362	CHAE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jimmy Lin	1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 04 April 2008.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 1-15 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 16-28 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                                                 |                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                            | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application |
|                                                                                                                                                 | 6) <input type="checkbox"/> Other: _____.                         |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :9/19/06,7/13/07,7/23/07,11/15/07.

***Election/Restrictions***

1. Applicant's election of Group II in the reply filed on 4/4/2008 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 1-15 and 24-28 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 4/4/2008.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
4. Claims 16-18 and 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto et al. (U.S. Publication No. 2001/0013920) in view of Yamamoto et al. (JP 61-055625, listed in the IDS filed 7/23/2007).

Hashimoto teaches a method of making a liquid crystal display panel (abstract). A substrate 21a is placed on a table 31, and liquid crystal (i.e., a dispensing material) is injected onto the substrate through a nozzle of a syringe ([0050]; Fig. 14).

Hashimoto does not teach a plurality of unit panels formed from the substrate. However, Yamamoto teaches that LCD substrates can comprise of a plurality of display unit panels (Figs. 1-2). Because Yamamoto teaches that the use of such LCD substrates were operable in the art, it would have been obvious to one of ordinary skill in the art at the time of invention to have formed the substrate of Hashimoto with a plurality of unit panels with a reasonable expectation of success.

Hashimoto and Yamamoto do not explicitly teach that a plurality of dispensers is used. However, it is well settled that the mere duplication of parts has no patentable significance unless

a new and unexpected result is produced (see MPEP 2144.04.VI.B.). The use of multiple dispensing syringes of Hashimoto would have decreased the amount of time required for deposition. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to have used a plurality of syringes of Hashimoto in the method of forming LCD substrates of Hashimoto and Yamamoto with a reasonable expectation of success. One would have been motivated to do so in order to have reduced process time and costs.

Claim 17: Hashimoto does not explicitly teach that sealant can be dispensed using a syringe. However, Hashimoto does teach that the sealant can be dispensed by any sort of method wherein the sealant is injected on the substrate through a nozzle [0046]. Hashimoto also teaches that a syringe can be used to inject material onto an LCD substrate [0050]. The selection of something based on its known suitability for its intended use has been held to support a *prima facie* case of obviousness. *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945). Because Hashimoto teaches that the nozzle of the syringe is operable for injecting a material onto an LCD substrate, it would have been obvious to one of ordinary skill in the art at the time of invention to have used the syringe of Hashimoto to inject the sealant onto the substrate with a reasonable expectation of success.

Claim 18: The plurality of dispensers would include a plurality of syringes.

Claim 20: Hashimoto teaches that a nozzle is formed at the end of a syringe (Fig. 14).

Claims 21-22: Yamamoto teaches that the unit panels are a plurality of picture display regions of different sizes (Figs. 1-2).

Claim 23: Hashimoto and Yamamoto do not explicitly teach that the picture display regions have at least two different driving modes, including one of IPS mode and TN mode. However, Hashimoto teaches that the liquid crystal composition can be used in any mode [0068]. One of ordinary skill in the art would have used whichever mode of the liquid crystal necessary for the LCD substrates. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to have used provided two different driving modes to the picture display regions of Yamamoto with a reasonable expectation of success.

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5. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto '920 in view of Yamamoto '625 as applied to claim 16 above, and further in view of Hashimoto et al. (U.S. Publication No. 2003/0083203).

Hashimoto '920 does not explicitly teach that the dispensing material in a first syringe is sealant and the dispensing material in a second syringe is silver paste.

The dispensing of sealant using the syringe of Hashimoto '920 is obvious for substantially the same reasons as discussed above.

As for dispensing silver paste, Hashimoto '203 teaches that conductive fine particles, such as silver, can be dropped onto an LCD substrate from a nozzle [0102]-[0104], wherein the silver is dropped in the form of dots at the outer edges of the image display to prevent breaks and short circuits ([0191]-[0195]; Fig. 8). Hashimoto '920 teaches that materials can be deposited onto an LCD substrate by dropping the material through the nozzle of a syringe. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to have connected the upper and lower substrates of Hashimoto '920 using the silver dots of Hashimoto '203 in order to have prevented breaks and short circuits. In addition, it would have been obvious to one of ordinary skill in the art at the time of invention to have dropped the silver dots onto the LCD substrate using the syringes of Hashimoto '920 with a reasonable expectation of success because the modification would have yielded nothing more than predictable results.

### ***Double Patenting***

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting

ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 16-22 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 10-11 and 13-15 of copending Application No. 10/691662. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of ‘662 fully encompasses the present claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

8. Claim 23 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 10-11 and 13-15 of copending Application No. 10/691662 in view of Hashimoto ‘920.

‘662 does not require the picture display regions having at least two different driving modes including at least one of IPS mode and TN mode. However, Hashimoto teaches that the liquid crystal composition can be used in any mode [0068]. One of ordinary skill in the art would have used whichever mode of the liquid crystal necessary for the LCD substrates. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to have used provided two different driving modes to the picture display regions with a reasonable expectation of success.

This is a provisional obviousness-type double patenting rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy Lin whose telephone number is (571)272-8902. The examiner can normally be reached on Monday thru Friday 8AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jimmy Lin/  
Examiner, Art Unit 1792

/Timothy H Meeks/  
Supervisory Patent Examiner, Art Unit  
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